

W R GRACE & CO  
Form 4  
February 21, 2007

**FORM 4**

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549**

OMB APPROVAL

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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
Poling Gregory E

(Last) (First) (Middle)  
C/O W. R. GRACE & CO., 7500  
GRACE DRIVE  
(Street)

COLUMBIA, MD 21044

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol  
W R GRACE & CO [GRA]

3. Date of Earliest Transaction  
(Month/Day/Year)  
02/20/2007

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

\_\_\_ Director \_\_\_ 10% Owner  
 Officer (give title below) \_\_\_ Other (specify below)  
Vice President

6. Individual or Joint/Group Filing(Check Applicable Line)  
 Form filed by One Reporting Person  
\_\_\_ Form filed by More than One Reporting Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

| 1. Title of Security (Instr. 3)                         | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---|--------------------------------------|--|--------------------------------|---|---|--|---|
|   |                                      |  | Code                           | V   | Amount  | (D)  | Price   |
| Common Stock, par value \$0.01 per share <sup>(1)</sup> | 02/20/2007                           |  | M                              |   | 10,789<br><u>(2)</u>  | A  | \$ 12.0409  |
| Common Stock, par value \$0.01 per share <sup>(1)</sup> | 02/20/2007                           |  | S                              |   | 10,789<br><u>(2)</u>  | D  | \$ 24.3993  |
|   |                                      |  |                                |   | 0   | D  |   |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

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**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned**  
(e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction Code (Instr. 8) | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | 6. Date Exercisable and Expiration Date (Month/Day/Year) | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) |              |                            |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|--------------|----------------------------|
|  |  |                                      |  | Code                           | V (A) (D)   | Date Exercisable   | Expiration Date   | Title        | Amount or Number of Shares |
| Employee Stock Options (rights to buy)     | \$ 12.0409   | 02/20/2007                           |  | M                              | 10,789<br>(2)   | 03/05/2000   | 03/04/2007  | Common Stock | 10,789                     |

## Reporting Owners

| Reporting Owner Name / Address  | Relationships |           |                |       |
|---|---------------|-----------|----------------|-------|
|   | Director      | 10% Owner | Officer        | Other |
| Poling Gregory E<br>C/O W. R. GRACE & CO.<br>7500 GRACE DRIVE<br>COLUMBIA, MD 21044 |               |           | Vice President |       |

## Signatures

Gregory E. Poling  
02/21/2007  
\*\*Signature of Reporting Person Date

## Explanation of Responses:

- \* If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- \*\* Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).
- (1) Each share of Common Stock also represents one Preferred Share Purchase Right. Each such Right entitles the holder to purchase Preferred Stock or other securities or property upon the occurrence of certain events and subject to certain conditions.
- (2) Exercise and sale pursuant to Rule 10b5-1 Trading Plan adopted September 2006 for options expiring March 4, 2007.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.